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ABSTRACT

An evaluation of the merits of education vouchers as a means of implementing educational reform is explored in this publication. The paper is divided into five sections. First, the historical and philosophical origins of the concept of vouchers are examined. The second section focuses on education vouchers in the context of recent developments in the theory of welfare economics and public finance. The third and fourth sections examine the Jencks report, a 1970 investigation of the feasibility of vouchers, and the experience with use of this model at Alum Rock, California. The latter details planning, implementation, and evaluation phases. Finally, based in part on the Alum Rock demonstration, an evaluation is made of the applicability of the economic theory implicit in voucher models to schooling situations. The paper concludes that although the picture presented at Alum Rock was mostly negative, debate concerning the merits of education vouchers is likely to continue. (Author)

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An Analysis of the Ideas Behind, and the Evidence on, Education Vouchers

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Introduction

In recent decades the focus of educational reform has shifted away from a classroom orientation towards a reconsideration of structural aspects of schooling systems. One suggested structural change has been the introduction of a voucher method of funding. In the schooling context a voucher is simply a tied coupon of a specified purchasing power issued directly to parents. Such vouchers can be redeemed for educational services at any prescribed voucher school, whether they be public or private. The defining characteristics of prescribed voucher schools vary from one voucher scheme to another, but a basic requirement common to almost all schemes is that the schools satisfy minimum educational standards determined by the State. Vouchers received from parents by schools are exchanged for public funds through a voucher funding authority.

Two essential elements of voucher schemes can be identified. First, the vouchers are issued directly to parents. And second, schools are dependent on attracting vouchers from parents for their funding. Beyond these elements voucher schemes can vary quite considerably.

In the late 1960's the Office of Economic Opportunity (the OEO) in the U.S. sponsored investigations into a number of, at the time, seemingly unconventional education and welfare programmes and experiments. Probably the best known, and certainly the most expensive was the New Jersey Income-Maintenance Experiment.[1] In the field of education, a team of researchers at the Centre for the Study of Public Policy at Cambridge, led by Christopher Jencks, was awarded on OEO contract to investigate the feasibility of education vouchers. Jencks and his team reported in 1970 favouring the trial of a 'Regulated Compensatory Voucher'.[2] After lengthy negotiations and bargaining by the stakeholders involved, a variant of this model was trialled in the Alum Rock School District in California from 1972 onwards. More recently in the United Kingdom a detailed feasibility study has been completed with respect to implementation of education vouchers in schools administered by the Kent County Council.

In Australia the voucher concept has also attracted some public discussion, a very brief examination of the idea being made by the Schools Commission in its first triennial report (Report for the Triennium 1976-78, June 1975, paras 3.35 to 3.38). Of more significance however, is the fact that the Commission has devoted a full chapter to voucher schemes in its recently issued discussion paper on school finance in Australia (Some Aspects of School Finance in Australia: A Discussion Paper Schools Commission, Canberra: AGPS, October, 1978). With respect to education policies of the political parties, a recommendation for the trialling of voucher funding was included in the education policy of the Liberal Party

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1. For further details see David Kershaw and Jerilyn Fair, The New Jersey Income-Maintenance Experiment, Volume 1: Operations, surveys, and administration (New York: Academic Press, 1976).

2. See Centre for the Study of Public Policy, Education Vouchers, A Report on Financing Elementary Education by Grants to Parents (Cambridge, Massachusetts: 1970).

in 1975. Given these background developments an evaluation of the merits of education vouchers as a means of implementing educational reform seems appropriate.

This paper is divided into five sections. First, the historical and philosophical origins of the concept of vouchers are examined. The second section focuses on education vouchers in the context of recent developments in the theory of welfare economics and public finance. The third section examines briefly Jencks' 1970 report, and the experience with vouchers at Alum Rock is described in the fourth section, detailing the planning, implementation and evaluation phases. Finally, based in part on the Alum Rock demonstration, the applicability of the economic theory implicit in voucher models to schooling situations is evaluated.

1. Origins of the Education Voucher Concept

Compared with the traditional method of funding schools, voucher schemes imply a very minimum role for the State in the provision of educational services. Specific argument for a voucher method of funding schools can be traced back to the early nineteenth century in the writings of Tom Paine, (1915, pp. 252-253) although the term 'voucher' itself was not used. However, most modern voucher advocates seem to have been influenced primarily by the educational philosophy of J.S. Mill. In fact Blaug (1972, p. 208) has argued that the voucher concept is pure Mill, except for the idea of State finance. The recent origins of proposals to introduce vouchers into the schools lie in a number of seemingly disparate areas - the private school lobby, neo-classical economists and some radical education reformers.

First, voucher-type schemes have for some time appeared attractive as a form of aid by stakeholders in the non-governmental schools. In 1926 in the United Kingdom, Cardinal Bourne, the Archbishop of Westminister, publicly canvassed a restricted means-tested voucher scheme as a means of giving additional aid to Roman Catholic elementary schools. (see Beales, 1970, pp. 6-12) Cardinal Bourne was concerned with the principle of freedom of choice, arguing that the State schools had become a monopoly for the lower social classes, with real freedom of choice in schooling being confined to the wealthy. Three decades later a very similar theme was taken up in the U.S. by a Jesuit priest, Virgil Blum (1958). His underlying philosophy justifying vouchers, was that the State's educational obligations are to children, and not institutions, and that vouchers would be an efficient and equitable way of guaranteeing satisfactory educational provision in a pluralistic society.

The Independent Schools Association in the United Kingdom examined voucher schemes at its Annual Conference in 1928 and 1929, and advocated that the State "should give every parent an education warrant of a value equal to the minimum cost of educating a child in a manner desired by the State" (Cited in Beales, 1970, p. 13). The main factor motivating the authors of the scheme were the perceived inequities and inefficiencies resulting from the existing method of financing schools which resulted in parents 'paying twice', (once through taxation and once through fees) should they choose to enrol their children in private schools. This scheme and the Bourne scheme failed to get support because the political climate was not favourable. Neither the Liberal or Conservative parties was prepared at the time to overhaul fundamental principles in relation to the law governing education.

In the last couple of decades strong support for the voucher method of funding public services has come from the neo-classical school of economists, particularly some public finance theorists. Voucher schemes have been proposed in recent years in the areas of housing, hospital, medical, and life insurance, the arts and schooling. Until very recently a voucher experiment in housing was being designed for trialling in Melbourne, Australia (The Housing Allowance Voucher Experiment, H.A.V.E.). The underlying theme in most of these voucher proposals is that State provision of the relevant services, as distinct from provision of finance is not necessary, nor by implication, desirable. This was the emphasis of the argument developed in the 1960's, first by Friedman in the U.S.A. in his essays on Capitalism and Freedom, (1962) and then in the United Kingdom by West in the rather controversial Education and the State, (1970) and by the two public finance theorists from York, Peacock and Wiseman, in their IEA monograph Education for Democrats (1964). The normative basis of the arguments advanced by these neo-classical economists are developed more fully in section three of this paper.

Education vouchers have also captured the imagination of some of the more radical educational reformers. The public school systems have been perceived by many, particularly in the United States, to be failing in their delivery of educational and social outcomes expected of them. As a consequence of their perceived societal failings, the schools have been diagnosed from several perspectives. The resultant proposals to aid the failing public schools have been many and varied: simple requests for additional resources; special programmes for the disadvantaged and minority groups; decentralization and community control of schools; performance contracting and deschooling are examples illustrating the range of proposed reform measures. In this context voucher advocates such as Jencks (1966), and Sizer (1969) argued that the public school system operating under a protective monopoly umbrella had become sluggish and laggard. The only way to make them perform better would be to subject them to more competitive pressure. The private schools were not subjecting the public schools to much competition, because only the wealthy few were able to afford them. So the argument went. To Sizer, the then Dean of the Harvard Graduate School of Education, the argument was a simple one:

> "Competition is the newest old panacea for the reform of American schools .... The public schools are a monopoly and monopolies offer neither variety nor high quality .... A marketplace must be created for education, with children and their parents as the choice-making consumers. The consumers, the argument continues, will pick the better schools most of the time, and in so doing, will force the quality of all to improve." (1969)

Sizer acknowledged such a description of the argument to be an oversimplification, but nevertheless was quite convinced that a change in control would lead to improvements in children's learning. Those who thought otherwise were deluding themselves. Advocacy of the voucher by the education reformers thus stemmed from a concern over the quality of education provided in the public schools and a lack of control on the part of parents in improving the schools in directions desired by them. Senior policy analysts in the U.S. also expressed an interest in vouchers particularly as a means of improving the position of the poor. Writing in 1969, Daniel Moynihan, of the Office of Economic Opportunity argued:

> "There is a growing consensus that the Federal Government should provide market competition for public programs, or devise ways to imitate market conditions. In particular, it is increasingly agreed that Federal aid should be given directly to the consumers of the programs concerned ... Probably no single development would more enliven and energize the role of government in urban affairs than a move from the monopoly service strategy of the grant-in-aid programs to a market strategy of providing the most reward to those suppliers that survive competition." (p. 16)

This concern at the Federal Government level in the U.S. to develop a market strategy for the poor was reflected in the studies and social experiments being sponsored by the OEO, which was the leading anti- poverty agency at the time. OEO had become disappointed with the apparent lack of success of programmes for the poor based on collective provision, even those designed on a compensatory distribution basis. As an alternative, OEO was looking at programmes which supplemented the financial resources of the poor, thereby giving them more influence and choice in their spending decisions for goods and services, particularly education and welfare services. The voucher study undertaken by the Centre for the study of Public Policy at Cambridge was part of this general approach.

2. The Philosophical Roots of Vouchers in Public Finance Theory

This section of the paper examines more closely the rationale for the education voucher as a policy instrument from the perspective of the theory of public finance. The emphasis in post-1939 Paretian welfare economics (sometimes called the 'new' welfare economics) is shown to diverge considerably from the welfare economics based on the philosophical premises of liberalism. In fact Peacock and Rowley have argued that "the conflict between the orthodox Paretian and liberal philosophies is nowhere more apparent than in the debate on the appropriate domain and institutional framework of collective choice in the so-called democratic societies". (1975 p. 103)

In the public finance literature a distinction is often made between three types of wants and goods that satisfy those wants - public goods, private goods and semi-public goods. These goods are also sometimes referred to as respectively, collective, individual and quasi-collective goods. Consumption of private goods is restricted to those consumers who are prepared to meet the terms of exchange set by owners of such goods. This is the 'exclusion principle' of pure private goods. Thus with private goods, allocation and distribution take place through the market mechanism, as does revenue production via prices paid to producers. Public goods however, confer simultaneous benefits on a number of people. With pure public goods (of which defence is probably the closest example) there is no rivalry amongst consumers in receiving the benefits. Because of this non-rivalryness in consumption, it is not possible to provide public goods for some consumers and not for others. Optimal provision of such goods requires that they be provided at zero prices in the public sector, with the necessary revenue production taking place via taxation. Now, semi-public goods, of which schooling is typically considered as an example, possess both private and public good characteristics. Semi-public goods are similar to public goods in the sense that the exclusion principle can apply. It is possible to provide goods such as schooling through the market. But with the provision of semi-public goods more than one person is affected i.e. externalities exist. If the provision of schooling generates positive externalities,

(an externality being defined as occurring whenever economic activity on the part of one individual generates an effect on some other individual not party to the activity) then allocation via the market will lead to a less than optimum allocation of resources (according to conventional Pareto criteria for resource allocation). Usually the minimum response of the Paretian economists to the existence of significant positive externalities in schooling is to advocate government-intervention via legislation requiring compulsory attendance up to some minimum age, thus ensuring that private consumption equals the social optimum. Public provision is not necessary to the standard Paretian externality argument. The rationale for direct public provision of schooling lies elsewhere.

Vouchers are an alternative to direct 'in-kind' provision of schooling in the public sector. To fully appreciate the nature of the argument for vouchers it is necessary to understand the way in which in-kind provision has been defended in the past, and is in fact defended by many of the critics of vouchers. Up until fairly recently, public provision of schooling has been justified by economists in the orthodox Paretian school in a rather ad hoc fashion. Blaug, for example, has argued that economists, qua economists, are not in a position to argue the case for public provision of schooling (1972 p. 120). Such a policy lies outside the individualistic value position of Paretian welfare economics. The appropriate defence of public schooling, Blaug maintains, is the necessity to achieve the non-economic objective of social cohesion. However, more recently, two developments in the public finance literature have particular relevance for any analysis about instruments of intervention in schooling. These developments are the concept of merit goods, first introduced by Musgrave, and second, Lester Thurow's notion of individual-societal preferences as distinct from personal-private preferences upon which Paretian welfare economics is built.

Merit goods are defined by Musgrave as those economic goods "so meritorious that their satisfaction is provided for through the public budget, over and above what is provided for through the market and paid for by private buyers" (1959, p. 13). Musgrave mentioned free education, along with subsidized low-cost housing as examples of merit goods. Since Musgrave's original discussion there has been considerable debate in the literature about the status of the merit goods concept in the normative theory of public finance.[3] Essentially this debate evolves around whether or not it is possible to determine the optimal provision of merit goods without abandoning the value judgments of the Pareto efficiency criterion. Can merit goods be grafted on to the Paretian approach to public policy or do they embody a quite different normative framework? A number of Paretian economists have attempted to integrate the merit goods concept into standard theory, yet at the same time it seems to be fairly clear that the provision of some merit goods does involve an interference with consumer preferences, either because it is necessary to achieve some notion of the 'common good' (such as social cohesion or equality of opportunity) or because the individual is unable to evaluate correctly for himself the benefits of the goods in question.

Economists such as Hochman and Rodgers (1971), Pauly (1967) and Olsen (1971) have argued that vouchers may be necessary to achieve an 'efficient' distribution of income. This argument rests on an analysis of the implications for instruments of policy of

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3. For a critical view see McLure jr, (1968); and for a defence of the merit goods concept see Head (1966 and 1969).

interdependence amongst individual utility functions. Two types of interdependence exist: "general", and "particular commodity". With general interdependence, the welfare of individual "A" is a function not only of his own consumption of goods, but also the general level of consumption of others. With 'particular-commodity' interdependence, the welfare function of "A" contains some of the specific commodities which person "B" consumes. In such a situation it can be shown that redistribution-in-kind is necessary to achieve an efficient optimal allocation of resources.[4] Such redistribution-in-kind can take place either through public provision or through an ear-marked voucher. However, despite this theoretical advance, a practical problem still exists. The attainment of optimality under these conditions is likely to be very difficult, requiring detailed knowledge of individual preference functions and a highly flexible pattern of voucher provision. Hence for this reason Paretian economists tend to be rather sceptical of the voucher instrument, and advocate collective provision on the grounds of practicability.

A more direct theoretical defence of public provision of schooling has been provided by Thurow (1974). He argues that the individualistic Paretian social welfare function is not a satisfactory basis for making social welfare judgments because of the existence of two different levels of consumer preference. Private-personal preferences of the Pareto type are quite different to what Thurow calls 'individual-societal' preferences. The latter deal with the best rules, structure and economic rewards in society i.e. preferences as to what constitutes a good society. Thus

> "Compulsory education implies that the rights of man include the right and the duty to acquire some minimum level of education - not because it maximizes the recipient's private-personal utility, but because it maximizes the individual-societal welfare of both the donor and the donee. As a result, restricted transfers flow not from interdependent private-personal utility functions, but from our individual-societal preferences and the resulting social welfare function". (Thurow, 1974, p. 193)

If collectively, individuals in society believe that, because of the existence of 'rights of man', or for whatever reason, schooling should be distributed within society more evenly than the distribution of general purchasing power, then this desire can only be realised in the form of in-kind transfers or specifically ear-marked cash transfers i.e. vouchers. It could be argued that Thurow's individual-societal preferences are another way of describing Musgrave's 'merit' wants. But what distinguishes Thurow's contribution is that he does not take preferences and values as given and innate. These are socially generated. The real problem is in deciding which values are so important as to establish a case for public provision of goods and services to ensure their creation and inculcation. Thurow maintains that in a democracy there are some beliefs and values that "are so basic, that society does not want to leave it to the accidental forms of the market place to determine whether individuals are or are not exposed to them" (Thurow 1974, p. 195). This value creation role is one of the expected roles of the public schools. Whether or not such a role can be effectively carried out as well by private schools funded by vouchers, depends essentially on the expectations that societies have

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4. A direct redistribution in cash will not achieve Pareto optimality with this type of interdependence.

at any point in time as to what values are likely to be inculcated in their private schools.

The main practical policy-relevant problem of Thurow's argument is the process of revelation of the 'individual-societal' preferences. Whereas private-personal preferences are revealed in the market, (which may of course be characterized by imperfections) individual-societal preferences are revealed in the political process. Hence the status to be given them as a useful guide for public policy, seems to rest on one's belief about the extent of 'political failure' and one's anxieties and fears about coercion in the public sector generally. It is with respect to this essentially political problem that the liberal welfare economists seem to be at odds with the Paretians and others.

Liberals accept the conceptual distinction between public and private goods, but do not accept the existence of market failure in the form of public good characteristics as a sufficient basis for government-intervention.[5] To the liberal welfare economists it is unsatisfactory simply to argue a case for government intervention on the basis of divergence from the ideal state of Pareto optimality. The relevant comparison should be between alternative institutional arrangements. One of the important criteria in such a comparison is the extent to which political institutions protect individual freedom. From this perspective, in areas such as schooling, where due to market failure, a private market may result in less than ideal resource allocation according to Pareto criteria, collective provision may in fact be less desirable. Thus for the liberals, 'political failure' is as much a reality to be reckonned with as market failure. How then do the liberals rank the alternative instruments to collective provision? Three possibilities are open: producer subsidies, un-tied cash transfers to consumers, and ear-marked transfers to consumers, i.e. vouchers. Of the three the un-tied cash transfer is clearly the most preferable to liberals such as Rowley and Peacock (1975, p. 127). However a conceded problem with cash subsidies is that parents may not use them to extend education consumption for their children i.e. they may not do enough justice to the public good characteristics of schooling. In this situation "the voucher principle can obviate the problem, though liberals cannot be entirely easy about the curtailment of household freedoms incumbent on such an intervention" (Rowley and Peacock 1975, p. 127). Hence to the liberal welfare economists, the voucher solution to financing schooling is a second-best solution (second to a free-market supported by un-tied cash subsidies to parents). However, if the practical political alternative is in fact not a free market, but is instead collective provision, then vouchers are clearly preferred. Peacock and Rowley see vouchers as an interim solution with the more preferable free-market emerging in time.

> "it is our contention that the collective choice solution for education fares badly in any comparative institutions analysis by comparison certainly with the various market regulation alternatives, and even the free-market solution ... once liberal considerations are given weight ... the voucher solution, in an appropriate form, presently dominates the field as the most attractive form of education support. With growing affluence, and with parents increasingly experienced in exercising choices in the expenditure of their vouchers, liberals indeed have faith

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5. The problem with the concept of market failure as a basis of government intervention in schooling is discussed in some detail by West (1970, pp. xxiii to xxx).

> that the free education market in due course of time could reassert itself as the rationale for voucher-type coercion slowly disappeared" (1975, p. 128).

With respect to the merit-good argument justifying collective provision in schooling the liberals seem equally unconvinced. West (1970, p. xxxiii) rejects the notion of merit goods as they involve a deliberate interference with consumer preferences. Rowley and Peacock however argue that even if merit attributes of schooling such as social cohesion are considered a desirable objective of educational policy, then a regulated market under vouchers can "be utilized to obtain any measure of social mixing considered desirable, simply by attaching suitable conditions to the issued vouchers". (1975, p. 127)

We can now make a brief attempt to synthesize the position of the public finance theorists on the voucher method of funding schools. Vouchers, rather than public provision, have been advocated as a more satisfactory method of catering to both the private and public good characteristics of schooling. Collective provision caters to the public good characteristics at the expense of the private characteristics. Vouchers are seen to have the advantage of strengthening consumer influence (i.e. catering to the private good characteristics) whilst at the same time dealing with the publicness problem to a tolerable extent. Vouchers thus present a 'half-way house' between collective choice via public provision and free individual choice in an unregulated market place. Despite attempts by some Paretian economists to argue for vouchers on the basis of achieving an efficient distribution of income, the main support for education vouchers has come from the liberal welfare economists. Their ideological committment to vouchers seems to be particularly strong.

3. The CSPP Report on Education Vouchers

Blaug has argued that "the voucher scheme stands or falls on questions of fact: will it have the consequences predicted by its advocates?" (1972, p. 314). While such a statement seems to discount the fundamental normative differences between voucher advocates (particularly the liberal welfare economists) and the critics, nevertheless, an examination of the available 'hard' evidence on voucher schemes is necessary to disentangle parts of the controversy. To date the only evidence we have on vouchers in school-level education that has been subjected to systematic evaluation, is the experiment with elementary schools in Alum Rock, California between 1972 and 1977. This experiment was funded by the OEO and later the National Institute of Education, (N.I.E.) and was the only experiment actually funded following the publication of the 1970 CSPP report.

In investigating the potentiality of education vouchers the OEO had 3 specific objectives in mind.

(1) To give poor parents greater influence over their children's education and greater choice amongst the programmes of education made available.

(2) To foster educational innovation in all schools.

(3) To make schools more accountable to parents at all income levels.

As indicated earlier, concern with the well-being of the poor was the prime consideration.

> "The study evolved from a general concern by OEO that .... our public schools are not meeting the educational needs of the poor. Study after study has indicated the general failure of existing remedial and compensatory programmes for the poor. At the same time, the poor, perhaps more than any other group in our society, must depend on public education for future success in life. One means of improving the education of the poor may be the education voucher system ...." (Office of Economic Opportunity, 1972, p.1)

The principal author of the CSPP report, Christopher Jencks, had already given cautious support to the notion of introducing more competition into schooling systems some years earlier:

> "If the terms of the competition are reasonable, there is every reason to suppose that it is healthy. Without it, both public and private enterprises have a way of ossifying. And if, as some fear, the public schools could not survive in open competition with private ones, then perhaps they should not survive." (1966, p. 27)

The CSPP report described the workings of eleven different voucher models and evaluated each of them in terms of common specified criteria. Rather than provide blanket support for the concept of education vouchers, the report supported trialling one particular voucher model. Jencks said

> "There are dozens of proposals and they have little in common. This makes it silly either to favour or to oppose vouchers in general. One must favour or oppose a particular voucher plan." (1971, p. 1)

Indeed, Jencks argued that some of the proposals that had been previously advocated, such as Friedman's unregulated model, would be disastrous in their consequences if implemented. The results, especially for the poor would be far worse than the existing system of educational finance.

The report was especially critical of the three most commonly cited arguments justifying public monopoly in schooling: technical monopoly, paternalism, and externalities. The nineteenth century classical economist and philosopher, J.S. Mill, rested his entire case for State Intervention in education on the paternalistic argument - "The uncultivated cannot be competent judges of cultivation"(Principles of Political Economy). Jencks however, cited the research literature on the education production function to support his case that professionals are not necessarily in a better position than parents to make effective choices. He argued that knowledge about likely effects of specific schools on specific children is very rudimentary, even for the experts: "There is no consensus about what causes what in education, much less any scientific evidence to back a consensus." (1970, p. 8) This lack of knowledge of production type relationships in schooling weakened the authoritative position of the State in making choices about education.

The report argued that the most persuasive of the three mentioned rationales favouring the retention of some form of public regulation of schooling was the existence of externalities. The term 'externalities' was however used fairly loosely in the report. The two particular

externalities mentioned, social cohesion and equality of opportunity, are really the merit attributes of education described earlier. However, as with the liberal welfare economists, Jencks believed that monopolistic control of educational choices by the State should not be necessary to maintain notions of social harmony and equality. The social good can be brought into line with the private good in a competitive market situation so long as such a market is adequately regulated.

Eleven different voucher models[6] were evaluated from the point of view of their expected effects on the education of disadvantaged children, and the level of control given to disadvantaged parents over their children's education, taking into account as well practical problems and political acceptability. The most widely popularised voucher model, Friedman's unregulated market model received strong criticism. In Friedman's model the value of the voucher is the same for each child, but schools can levy additional fees if they so wish. Jencks believed that with entrenched inequality in the distribution of income and wealth, by allowing individuals to freely supplement the value of the vouchers from their own private sources resources would be systematically redirected away from the poor to those with greater purchasing power, producing consequent increases in economic segregation in the schools. The middle and upper middle income classes would desert the public schools, with the schools thus becoming dumping grounds for disadvantaged children and children from families apparently negligent and/or indifferent to their children's education. For these reasons mainly, Jencks rejected the Friedman model, and other similar models, proposing instead a tightly regulated model, containing strong financial incentives for schools to enrol disadvantaged children. This model advocated by Jencks for limited trialling in the U.S. by the OEO was called the 'regulated compensatory' model.

The essential features of this model were as follows -

1. Each child receives a voucher roughly equal to the per pupil cost of schooling in his area.

2. Voucher schools are not allowed to charge tuition beyond the value of the voucher.

3. Schools can, if they wish increase their expenditure per pupil by seeking funds from outside agencies.

4. Schools which enrol disadvantaged children receive a compensatory voucher.

5. Children's transportation costs to the school of their choice would be paid by the central funding authorities.

6. Several restrictions would be necessary to be placed on schools to become an "approved voucher school", eligible to case vouchers.

   (a) accept any applicant so long as it had vacant places;

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6. By 'voucher model' is meant a set of ground rules with respect to how the value of the voucher is determined; how schools are allowed to raise additional funds; and how schools select students in situations where the number of applications exceeds the number of schooling places available.

(b) if the number of applicants exceeds the number of available places, fill half the places randomly and fill the other half in such a way as not to discriminate against ethnic minorities.

(c) make available a wide variety of information about facilities, teachers and programmes.

The report argued that this model gives schools and parents a fair amount of latitude in determining expenditure levels. For each, however the price of choosing a high expenditure level would be a school with large numbers of disadvantaged children. In the same vein, the price for the parent of choosing a school with an "above average mix of students" would be choosing a school with a lower than average per capita resource mix.

This model was technically and conceptually complex and when the report was made public the idea failed to capture widespread support. Cohen and Farrar have argued in a recent evaluation, that "the CSPP voucher project embraced the worst of both worlds" (1977, p. 76). Complexities and regulatory procedures were incorporated into Jenck's scheme to protect and promote equality and avoid discrimination. Yet these measures did not satisfy most 'liberal' opponents of the scheme. On the other hand the extremely regulatory aspects alienated conservative supporters such as Friedman. In addition "making what had been a simple idea infinitely complex impeded easy discussion, quick comprehension, and local adaptation" (1977, p. 77).

The failure of the CSPP proposal to inspire the imagination of significant interests groups in education had an actual bearing on the type of experiment trialled later at Alum Rock. Cohen and Farrar believe of considerable significance was the implausibility of a group such as CSPP to stimulate local discussion. They had very little recent school experience and limited political experience. And in addition, "they were inclined to believe that the people who ran public schools were either dim or nasty - or both" (1977, p. 77). Also,unlike the other main OEO experiment, the negative income tax, education vouchers lacked a solid constituency within the government. And within the cities and local communities themselves, there was no stable and cohesive base of support. The Catholics, who stood to gain considerably from the CSPP scheme seemed to favour other forms of aid, with fewer strings attached than the 'regulated compensatory model'. The other main group expected to benefit, the poor and the minorities, were badly organized. Blacks were generally distrustful of any scheme placing the burden on minority choice, or allowing whites not to choose minority schools if they so wished. And finally, the fragmentation of political power vis-a-vis schooling, prevented organised local enthusiasm. Cohen and Farrar argue that:

> "The voucher-project staff labored under a delusion widespread among recent school reformers: that political power in urban education is centralized and monolithic, and that organized grassroots power is needed to overcome resistance" (1977, p. 78).

The reverse situation was closer to the truth. Superintendents were hampered in making decisions by politically divided school boards, by principals and district administrators exercising their autonomy; and by organized interest groups both inside and outside the schools.

The CSPP and the OEO had not expected this delicate balance in the locus of control in the schools. The voucher idea was not just a simple change. It "would have required the renegotiation of all treaties binding a city school system together. The idea thus raised anxieties all round" (Cohen and Farrar, 1977, p. 79).

4. The Alum Rock Voucher Demonstration

Following receipt of the CSPP report in May 1970 and its enthusiastic acceptance of the main recommendations, the Office of Economic Opportunity commissioned voucher feasibility studies in four school districts: Gary, Indiana; Seattle, Washington; San Francisco, California; and Alum Rock, a school district in San Jose, California. Another two feasibility studies were later conducted for school districts in New Hampshire and in East Hartford, Connecticut. On completion of the feasibility studies, three of the original four districts rejected the proposed OEO "regulated compensatory voucher" scheme. The most common given reasons for rejection were:

* opposition by teacher organizations.

* indifference and sometimes suspicion of parent groups.

* fear that free parental choice would increase racial segregation.

* an unwillingness to serve as 'guinea pigs' for a basically untested model.

* absence of state legislation permitting private school participation.

* opposition to making private and parochial schools eligible for public funds.

The OEO had to find a willing experimenter of the voucher scheme by Spring 1972, otherwise earmarked funds would have to be surrendered. Finally, by early 1972 the Alum Rock School District had argreed to accept OEO money for a limited trialling of vouchers. However, the voucher model agreed upon did contain a number of significant modifications to the original model. To grasp the significance of these differences it is necessary to understand the background to the negotiations between Alum Rock and OEO and the reasons for Alum Rock wishing to trial the voucher concept.

Alum Rock in 1970 was a medium-sized urban school district of 25 schools and 15,000 students. About half the students were Mexican-American, 40 per cent were Anglo-American and 10 per cent were black. Most were from lower middle and lower class families. The population was highly transient with about a 30 per cent annual residential turnover. There was no consistant pattern of ethnic or racial housing segregation. There was little effective focus for organized social change in the district. Teacher relationships with the District superintendent were cordial and cooperative. Alum Rock school district had been affected by social changes in the 1960's. School vandalism and fires had increased; financial difficulties increased; small but vocal activist groups were beginning to complain that the schools were not adequately educating their children. The District superintendent appointed in 1968, William Jefferds, was keen to respond to these problems

of the district by encouraging community involvement and decentralizing decision-making so that the schools would be sensitive and responsive to expressed community needs.

Jefferds was very enthusiastic towards vouchers because he saw them as a way of decentralizing the schools, and perhaps just as importantly, as a way of improving the district's financial position. Thus right from the outset, there was a difference in priorities between the finding agency (OEO) and the experimenting school district (Alum Rock). This resulted in ambiguities and tensions throughout the period of the voucher trial, and a basic conflict between the research and political objectives of the experiment. As Cohen and Farrar have argued:

> "OEO wanted a test of consumer sovereignty, while Alum Rock wanted OEO support for its decentralization plan." (1977, p. 81)

The factors leading to the OEO agreeing to fund a transitional version of the regulated compensatory model were important. With the rejection of OEO's offer of funds in the other three districts, the relative bargaining position of Alum Rock vis-a-vis the OEO increased considerably, enabling it to secure changes on the model in accordance with the needs of the local community. Second, in 1971 the California legislature failed to pass legislation permitting the entrance of private and parochial schools into a voucher demonstration. Thus for a voucher demonstration to be started, it would have to be, at least in the interim, a "public-schools only" version. Third, the local teachers organization, the Alum Rock Educators Association (AREA) was worried about certain aspects of the proposed OEO model. The leadership of AREA was independent and community-oriented and did not automatically follow the stated policy of the National Education Association (N.E.A.). They adopted an officially neutral policy towards vouchers leaving it to individual teachers to decide for themselves if they wished to participate in voucher trials. Nevertheless, those teachers sympathetic towards vouchers did want guarantees of job security. Similarly and fourthly, parents in the area wanted a guarantee that they would be able to send their children to neighbourhood schools i.e. they were insisting on squatters' rights in schools. Finally, it became apparent that the local school board could not legally give up its authority over the operation of schools in the district. As a result of these factors one Rand researcher has argued that "the cost of an agreement which seemingly pleased all parties was a proposal that was tentative, ambiguous and potentially open to misunderstandings (Levinson, 1976, p. 10). The 'transition model' agreed to in March 1972 by OEO and Alum Rock contained the following characteristics.

* The experiment would consist initially of 6 public schools only of the district's 24 schools.

* All schools involved would volunteer to participate, and, when possible, only volunteer teachers would be used.

* Each school would offer at least two alternative educational programmes, called "mini-schools".

* Teachers' job tenure and seniority rights were guaranteed via a fund created by the OEO.

* The local school board, and not an independent EVA was put in charge of the operation.

* The size of each programme was to be determined by parent demand. It was expected that there would be at least 10 per cent excess capacity in all participating schools, with portable classrooms readily available should enrollments exceed capacity.

* The basic voucher would be funded from the district, with the compensatory voucher funded by OEO.

It should be stressed, however, that the Alum Rock agreement was only a set of general rules, waiting to be elaborated and modified as the project was carried out. In April 1972, OEO awarded the Rand Corporation a contract, which was subsequently renewed by the National Institute of Education (NIE) for the analysis and evaluation of the demonstration. The evaluation process developed by Rand was based on a theoretical model of assumed cause and effect relationships in a voucher system. The key elements of this Rand 'theory of vouchers' are explained as follows. (Weiler et al., 1974, pp. 3-4).

> "The argument for trying out an education voucher system is clearcut. Most children attend their local public schools which, under the influence of state regulation and school board consensus, offer a rather standardized brand of schooling. If parents or children want to change the quality or nature of schooling, their real choices are limited. They can try to change school policies, which means trying to change an established bureaucracy. They can choose another school in the district or another school district, but for various reasons - such as the similarity of program within and between most districts, and the economic and social costs of moving - this choice is more apparent than real for the average person. Or they can send their children to private or parochial schools, an alternative that is too expensive for most parents and often unavailable locally ...
>
> Education vouchers represent a possible way around these impediments. The creation of an elementary and secondary education marketplace, like the one already found in higher education, would motivate educators to establish new schools and thus new educational choices.
>
> ... The exercise of parental choice, it is presumed, would lead to greater parental influence over the satisfaction with schooling because more programs suited to individual students needs would be possible under a voucher system. Parent economic power would supply new incentives for teachers and administrators to respond to parents' and children's needs, thereby leading to more innovation, diversity, and responsiveness in schooling. Students would reap the rewards of better academic achievement, more favorable attitudes toward school, and a greater sense of efficacy or of control over their environment. It should be noted, however, that in contrast to many large-scale educational interventions of recent years (such as federal compensatory education programs), improved academic achievement is not an indispensable element of a successful voucher programe. If parents, students, and educators prefer vouchers to the existing system, thanks to opportunities for choice, innovation, and greater responsiveness to individual needs,

then vouchers could be construed a success whether or not academic achievement, as ordinarily measured, improves."

This voucher theory envisions the replacement of bureaucratic decree in resource allocation by an education market in which organizations and individuals interact in response to choice and incentives created in the market. In the Alum Rock demonstration, the various elements of the transition model were implemented as a series of independent components, these components being introduced gradually in an incremental fashion over time. This was not the way that OEO and NIE had initially envisioned the scheme being introduced. They had conceived of the voucher model as a unified structural change in a school system. However it was simply not possible, given considerations of time, resources, and lack of expertise to implement the scheme in its entirety initially. Different components of the overall structural change were emphasized in each of the first three years of the experiment. The first year emphasized the implementation of mini-schools; implementation of a budget system was emphasized in the second year; and in the third year evaluation of programs and provision of information to parents was emphasized. The fundamental problem with this method of implementation was that at no time was the total structural voucher concept in full operation.

In its evaluation of the experiment Rand emphasized the difference between interim results and possible long-term findings. The first set of interim results were produced in June 1974 for the first year of the operation and the major findings were:-

First with respect to the establishment, responsiveness and effects of the mini-schools.

* 22 mini-schools emerged at the 6 voucher schools. A large majority of teachers perceived the mini-schools to represent significant departures from previous educational practices.

* The increased level of instructional expenditure from the compensatory vouchers was perceived by teachers as the major advantage of the demonstration. In November 1972, 82 per cent of voucher teachers agreed that "all things considered, the major benefit of the voucher system is the additional money received by schools in the district." (Weiler et al., 1974, p. xiv)

* During the year popular mini-schools were unwilling to expand in response to parental demand. There were several reasons for this. First financial incentives were weak. More enrolled students meant more income to the school. However, once classrooms were filled, the incentive to enrol new students diminished. In this case the marginal cost of employing a new teacher grossly exceeded the marginal revenue of enrolling an additional student. In addition, the existence of ample discretionary funds from the compensatory vouchers reduced significantly the economic incentive to expand. Second, strong professional norms against competition emerged. Many teachers viewed competition between mini-schools as undesirable, unprofessional and unethical. Third, some mini-schools feared disruption to existing patterns of interaction and organization as a consequence of expansion. Fourth, many mini-schools feared a reduction in the quality of instruction with continual expansion of enrolments.

* Teachers were able to exercise greater control over the curriculum following the creation of mini-schools and the existence of discretionary funds. Evidence of increased accountability amongst teaching peers emerged. However tensions between mini-schools did emerge. Almost all voucher teachers reported working longer hours.

* At the conclusion of the first year, most voucher teachers believed that the advantages of the demonstration outweighed the disadvantages. Attitudes of voucher teachers generally changed from favourable to more favourable as the first year progressed.

* The decentralization of authority in the experiment appeared to be closely tied to the discretionary funds.

Second, the results concerning the attitudes of parents and their responses to the choices offered.

* In the first year there was no dramatic change to the existing limited pattern of parental decision-making.

* After a year's experience significantly more parents were aware of the existence of the demonstration and of the mini-school programmes. Better educated and wealthier parents were a little more likely to know about vouchers than other parents.

* In general, parents perceived genuine educational diversity in the range of offerings of mini-schools, liked the idea of choosing programmes, and felt satisfied with the offerings available.

* Parents strongly tended to select the school nearest their home or the one their child previously attended. During the first year parents displayed a low propensity to transfer their children between mini-schools or schools.

Summing up the results for the first year the Rand report said.

> "The major discernible effect of the first year of the demonstration has not been upon parents' behaviour or students' academic achievement, but on the role of central district staff, principals, and teachers. Each voucher school has gained new autonomy, and teachers are now working in new cooperative arrangements and with new discretionary power over resources. It remains to be seen whether the various changes will improve the quality of education and the relationship between citizens and their schools". (Weiler, et al., 1974, p. xxv).

Levinson has described the main changes in the demonstration which occurred beyond the first year (1976, pp. 15-19). The size of the experiment increased to 13 schools and 45 mini-schools in the second year. As in the first year, principals provided the major impetus for schools to join. To cope with programme expansion in "popular" mini-schools a technique termed 'satelliting' was tried, and failed, making it necessary to impose a maximum on school size. Also, after fairly lengthy negotiations with teacher organizations, approval was given for a new private school to enter the demonstration. The school, Greater Resources Organized with Kids (called GRO-Kids) was the innovation of a group of

young teachers from outside the district. However the very protracted delay in getting started dissipated parent-interest, and when the school was finally ready to open, it became apparent that there would be too few enrollees.

At the end of the second year shifts in programme size had been slight and this factor combined with excess capacity in most school[illegible]e it unnecessary to maintain squatters' rights for parents.

In the third year programme autonomy in the mini-schools diminished considerably. With falling enrollments and rapid inflation affecting costs, budgetary concerns dominated. Staff were laid off on a seniority basis which weakened programmes with special needs considerably. Also, in the fourth year all additional monies from compensatory vouchers were pooled into the one fund, with schools submitting claims upon this fund as total units, rather than as mini-schools. In addition, as a financial stringency measure, maximum class sizes were fixed, making it no longer possible for mini-schools to earn extra income by taking in more students, unless there were some classes below the maximum. As the demonstration entered its fourth year, no further new mini-schools had been created, and very little change in mini-school size had occurred.

Parental involvement in advising and decision-making diminished as the demonstration progressed. In the first year parent advisory committees were established for all mini-schools. Only 50 per cent of such boards were still functioning by the end of the third year. As at 1976 any parts of the voucher experiment remaining were either beneficial to, or not threatening established values and practices in the school district. An incremental process of recentralization had emerged, mainly due to the excessive administrative and planning functions required of each mini-school. Also, several policy changes (already mentioned) reduced mini-school incentives to administer their own funds.

Levinson has argued that this reversion of budgetary and advisory functions from the mini-school to the school resulted from a conflict in the design of the experiment, with mini-schools having to share budgetary and curricular control. This dual authority could only exist with plenty of discretionary resources (1976, p. 21). The other main factor encouraging recentralization was dissatisfaction amongst teachers and principals, particularly with respect to the burden of taking on added responsibilities in budgeting and parent advising; and with respect to uneasiness about competitive pressures amongst peers. Some teachers felt vulnerable in mini-schools and missed the sense of belonging to a total school. Uncertainty of enrollments further increased anxiety.

> "The budget crisis, therefore provided an opportunity for principals and teachers to rid themselves of aspects of the voucher system which they thought unpleasant, such as competition for enrollment, while maintaining some of the advantages of that system, such as mini-schools, which allow teachers to work in small groups, and participatory decision making". (Levinson, 1976, p. 22)

Accepting Rand's analysis of the results of the first four years, it appears that the underlying assumption of parents using their choice to make schools compete for students did not hold up over time. The main reasons limiting competition operating were the initial high level of satisfaction of parents with their schools; the high transiency factor in the district making consumer education difficult; and the strong tendency of parents to think in terms of neighbourhood schools rather than mini-schools. Schools did not actively compete for students

because of the very considerable uncertainty associated with open enrollments and because teachers for several reasons did not respond to market incentives. Teachers saw many problems associated with active competition resulting in increased size of mini-schools. First, it meant more administrative work. Second, after the second year, teachers lacked control in hiring and as a consequence did not want to risk the consequence of working with unsuitable colleagues. Third, the generous compensatory money seemed to reduce the economic incentive to enrol more students.

In summary then, in terms of its fundamental purpose, the Alum Rock voucher demonstration was not successful.

> "... the purpose of the voucher demonstration was to create a basic structural change where parent choice rather than bureaucratic decisions determined the allocation of educational resources ...
> ... This basic structural change has not occurred at Alum Rock". (Levinson, 1976, p. 31)

The organizational structure of the school system at Alum Rock successfully resisted attempts to be charged from a monopoly to a market system. A central premise of a free market is the belief in consumer sovereignty i.e. the consumer knows what is best for him and will exercise his choice if given the opportunity. Central to the Alum Rock School system was the belief that professionals are the best judges of the interests of students. Routine and procedures supporting this belief were entrenched. Hence it was a monumental task to expect professional autonomy and authority in a public monopoly to be supplanted by consumer sovereignty in a market.

5. How 'hard' is the evidence from Alum Rock?

Can we infer anything meaningful from the relative lack of success of the Alum Rock experiment about the potentiality of creating an educational market place as a vehicle for educational reform? Clearly, it would be helpful if we knew the underlying reasons for this relative lack of success. Was it due to lack of preparation and insufficient attention to detail in execution? Or were too many special factors at work at Alum Rock making it difficult to really put the voucher model to test? Or was the 'theory of vouchers' behind the experiment misspecified in terms of assumptions made about values and mechanisms in modern school systems? There is undoubtedly some truth in each of these explanations, however it does appear with the benefit of hindsight that certain key elements of the theory of vouchers were misspecified. In examining the underlying theory of vouchers it is convenient to treat separately the demand and supply mechanisms in the educational market-place, recognising that the two mechanisms are linked in an interdependent fashion. First, the demand mechanism. By this we mean the factors affecting the choices that parents make for their children's schooling. We could construct a vector of factors affecting in a causal way the actual choices made by parents, e.g.-

Parental Choice in schooling = f	Taste or preference (eg. public vs private denominational) Level of satisfaction with existing choice

Availability of alternatives
Adequacy and real cost of information
Role perception towards parental decision-making
Family Income and Price of Schooling.

The Alum Rock demonstration highlighted three important factors with respect to this demand mechanism. First, concerning 'taste' or 'preference', the holding power of the neighbourhood school was grossly underestimated. Although, as the experiment progressed, more parents did choose a mini-school from other than the neighbourhood school, this pattern of choice was still only confined to a minority of parents. Second, the voucher idea was "based on a serious overestimate of popular discontent and the demand for change in education" (Cohen and Farrar, 1977, p. 96). This was highlighted in the early Rand surveys which revealed a high level of parental satisfaction with their schools.

A significant insight into this phenomenon of limited exercise of choice in schooling by parents when given the opportunity, is available in the work of Hirschman (Exit, Voice and Loyalty, 1970). He inquired into the way in which consumers express their dissatisfaction with a deterioration in quality of a good or service and the manner in which organizations react to such dissatisfaction. Consumers can respond in either of two ways. First, by exercising what Hirschman calls the "exit" option i.e. the consumer stops buying the good or (in the case of an organization) leaves the organization. This option or reaction belongs to the realm of economics. In the economics literature the dissatisfied consumer uses the market to defend his welfare or improve his position. This sets in motion market forces that may lead to an improvement in performance. The alternative way in which consumers can react is to use the "voice" option. Voice is defined by Hirschman as

> "any attempt to change, rather than escape from, an objectionable state of affairs, whether through individual or collective petition to the management directly in charge, through appeal to a higher authority with the intention of forcing a change in management, or through various types of actions and protests, including those that are meant to mobilize public opinion" (1979, p. 30).

Voice belongs to the world of overt political action. The voucher proposal is based on the exit option. One of the explicit rationales for the voucher experiment according to Jencks, N.I.E. and the Rand Corporation (although couched in different terminology) was the existing weakness of the voice option in schools. If the exit option were made available, via the creation of an educational market place under vouchers, then parents would use it. The economists generally have had a very strong bias towards mechanisms based on the exit option such as vouchers. They see the strengthening of the market as the best and most effective way of protecting and increasing the influence of the consumer which as indicated earlier, results in a movement toward the ideal state of Pareto optimality. As Hirschman has argued "the economist tends naturally to think that his mechanism is far more efficient and is in fact the only one to be taken seriously" (1970, p. 116). Utilizing Hirschman's conceptual framework of exit and voice we can then ask why the exit option proved relatively ineffective in the experiment with vouchers at Alum Rock. If it is valid to generalize, the Alum Rock experiment revealed that even in a relatively unconstrained decision-making environment with respect to educational choice, the exit option is unlikely to be exercised frequently. I would argue that there are

several reasons for this. First, for the majority of parents, decisions about elementary schooling for their children are "once in a lifetime type" decisions. Preference for neighbourhood schools is very strong. In the Australian school system, the percentage of children enrolled in private schools in the elementary years is much lower than in the upper-secondary years. Although financial considerations may be important, this distribution is consistent with the very strong tendency of the majority of parents to enrol elementary aged children in neighbourhood schools. Also, with the ideological/philosophical dimension to choice in education, particularly when the choice is between public and private denominational schools, loyalty of parents to their particular choice is likely to be strong. In addition, in the situation of perceived deterioration in quality in a child's existing school, parents know that there can be significant costs, as well as benefits, when the exit option is exercised. Continual changing of schools can be unsettling on children. Research results confirm this belief (Boardman, Davis and Sanday, 1977, p. 38). Thus an argument can be advanced that for elementary schools at least, the exit option may be used by many parents only as a last alternative. Thus using vouchers to liberalise the conditions under which the exit option can be exercised may, on the basis of this argument, produce only a marginal increase in usage of this mechanism.

Another relevant factor constraining the demand mechanism in schooling is the role perception of parents. The voucher scheme if successful, envisioned a shift in power from schooling professionals to parents via the decisions made by parents. The voucher scheme attempted to "loosen up" the power structure in schooling to enable a redistribution of power from teachers to parents. In the demonstration however, the position of those with some power (the teachers) was strengthened. Cohen and Farrar argue that such a perverse result occurred because the theory of vouchers developed by Rand and N.I.E. ignored some important historical socio-cultural factors. Their thesis is that the imbalance of political power which undoubtedly did exist at Alum Rock and other U.S. school districts did not have political origins. Rather it resulted from "a social division of labour that encourages the specialization of work, the professionalization of roles, and the partitioning of authority. In advanced industrial societies this solidifies professional power in education, as well as discouraging active parental involvement" (1977, p. 92). With the modernization of societies, education, through schools, has become the domain of the specialist, and as a consequence parents have seen their educational role narrowed. Hence, a politico/economic solution, such as vouchers, to the imbalance in power in the schools, given that the main cause of such imbalance is not political, is unlikely to produce more than marginal results. The education voucher, particularly the watered-down 'public-schools only regulated compensatory model' does not change established norms and patterns of decision making in society i.e. the existing social division of labour is not threatened by vouchers.

From this perspective it is possible to reinterpret the actual results of the Alum Rock experiment concerning the decisions of parents. The surveys did reveal higher levels of parental satisfaction with the schools. The parents did make choices from a genuinely wider range of options. But these two results in no way resulted in parents being more powerful and hence influencing the allocation of resources. The range and nature of the alternative programmes in the mini-schools was devised by the teachers themselves i.e. the more wide-ranging choices of parents were made within the established roles.

As with the demand mechanism, the schooling supply mechanism at Alum Rock also proved to be relatively unresponsive. The supply mechanism describes the way in which schools respond to choices made by parents and incentives in the education market-place generally. We can list some of the factors affecting this mechanism as follows:

Supply mechanism in schooling = f	Legislative, administrative, and policy constraints Objectives of decision-makers in schools Discretion and control over resources by teachers and principals in schools Level of satisfaction of professionals with existing programmes Technical difficulties and resultant constraints

Because of the exclusion of private schools, the responsiveness of the supply mechanism in a genuinely competitive market-place was not really tested at Alum Rock. Also the impetus to create the GRO-kids school came from teachers outside the district, not parents, the consumers. Hence no real competitive threat was posed to existing schools. Teachers in the mini-schools did not actively compete for students because they disliked competition; they did not see themselves as entrepreneurs; and their employment position, because of job guarantees was not threatened by an unwillingness to compete. Also the design of the experiment itself weakened the responsiveness of schools. With the high and even distribution of poor parents throughout the school district, the extra money available to schools from the compensatory vouchers reduced considerably the need to compete for students in the education market-place. The Alum Rock demonstration appears to have been a classic example of poor policy design with the number of instruments of policy being less than the number of objectives. With the two objectives of strengthening consumer influence and improving the relative position of the poor, and the single instrument of the education voucher, it was inevitable that concessions would occurr to the effectiveness of each of the two objectives. A more promising combination of objectives and instruments perhaps would have been to assign the negative income tax to the latter objective, freeing up a less tightly regulated education voucher to deal with the consumer influence objective.

Although the picture presented from Alum Rock is overall rather negative, debate concerning the merits of education vouchers is likely to continue. For those such as Blaug who wanted a test of some 'positive' voucher theory, the Alum Rock experience is inconclusive. What occurred was a demonstration, rather than an experiment capable of testing satisfactorily hypotheses about educational choice. For other protagonists, the Alum Rock story is probably largely irrelevant. Liberals believe that vouchers are a more preferable method of funding schools than collective provision. It would need more than a failed watered-down demonstration to shake this normative conviction.

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